UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/652,153	08/31/2000	Peretz Moshes Feder	2925-434P	2613

			EXAMINER

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ART UNIT	PAPER NUMBER
2154	

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<table>
<tr><td rowspan="2">Office Action Summary</td><td>Application No.
09/652,153</td><td>Applicant(s)
FEDER ET AL.</td></tr>
<tr><td>Examiner
Dustin Nguyen</td><td>Art Unit
2154</td></tr>
</table>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>02 September 2005</u>.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-26</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-26</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-26 are presented for examination.

Response to Arguments

2.   Applicant's arguments filed 09/02/2005 have been fully considered but they are not

persuasive.

3.   The declaration filed on 09/02/2005 under 37 CFR 1.131 has been considered but is

ineffective to overcome the Watanabe et al. [US Patent No 6,285,662] reference.

4.   A general allegation that the invention was completed prior to the date of the reference is

not sufficient. Ex parte Saunders, 1883 C.D. 23, 23 O.G. 1224 (comm'r Pat. 1883). Similarly, a

declaration by the inventor to the effect that his or her invention was conceived or reduced to

practice prior to the reference date, without a statement of facts demonstrating the correctness of

this conclusion, is insufficient to satisfy 37 CFR 1.131. The affidavit or declaration and exhibits

must clearly explain which facts or data applicant is relying on to show completion of his or her

invention prior to the particular date. Vague and general statements in broad terms about what

the exhibits describe along with a general assertion that the exhibits describe a reduction to

practice "amounts essentially to mere pleading, unsupported by proof or a showing of facts" and,

thus, does not satisfy the requirements of 37 CFR 1.131 (b). In re Borkowski, 505 F.2d 713, 184

USPQ 29 (CCPA 1974). Applicant must give a clear explanation of the exhibits pointing out

exactly what facts are established and relied on by applicant. 505 F.2d at 718-19, 184 USPQ at

33.

5.   The evidence submitted is insufficient to establish a conception of the invention prior to

the effective date of the Watanabe reference. While conception is the mental part of the

inventive act, it must be capable of proof, such as by demonstrative evidence or by a complete

disclosure to another. Conception is more than a vague idea of how to solve a problem. The

requisite means themselves and their interaction must also be comprehended. See *Mergenthaler

v. Scudder*, 1897 C.D. 724, 81 O.G. 1417 (D.C. Cir. 1897).

6.   The evidence submitted is insufficient to establish diligence from a date prior to the date

of reduction to practice of the Watanabe reference to either a constructive reduction to practice

or an actual reduction to practice. When alleging that conception or a reduction to practice

occurred prior to the effective date of the reference, the dates in the oath or declaration maybe

the actual dates or, if the applicant or patent owner does not desire to disclose his or her actual

dates, he or she may merely allege that the acts referred to occurred prior to a specified date.

However, the actual dates of acts relied on to establish diligence must be provided. See MPEP

§715.07(a) regarding diligence requirement.

Allowable Subject Matter

7.   Claims 5, 6, 15-17, 21-23 are objected to as being dependent upon a rejected base claim,

but would be allowable if rewritten in independent form including all of the limitations of the

base claim and any intervening claims.

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

9.   Claims 1, 4, 7, 8, 12-14, 25, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Watanabe et al. [US Patent No 6,285,662], in view of Abi-Nassif [US Patent No

6,215,792].

10.   As per claim 1, Watanabe discloses a method of transmitting data over a medium, the

method comprising the step of:

        obtaining a back-off delay window for retransmitting a data packet [col 8, lines 17-24],

the back-off delay window obtained being based upon a number of unsuccessful transmissions of

the data packet or a predetermined initialized value [col 5, lines 43-46; and col 8, lines 36-46].

        Watanabe does not specifically disclose the obtained back-off delay window is less than

two times a preceding back-off delay window.

Abi-Nassif discloses the obtained back-off delay window is less than two times a

preceding back-off delay window [i.e. the new backoff window size less than the second

backoff window size] [col 8, lines 15-18].

It would have been obvious to a person skill in the art at the time the invention was made

to combine the teaching of Watanabe and Abi-Nassif because Nassif's teaching of back-off delay

window would allow Watanebe's system to dynamically adjust the backoff window size used

during a ranging and adjustment process in an attempt to maximize the probability of success

outcomes during contention access [Abi-Nassif, col 2, lines 5-8].

11.   As per claim 4, Watanabe discloses the obtained back-off delay is determined using a

formula [col 10, lines 33-45; and col 11, lines 46-60].

12.   As per claim 7, Watanabe discloses method of transmitting data over a medium, the

method comprising the step of:

obtaining a back-off delay window for retransmitting a data packet [col 8, lines 17-24],

the back-off delay window obtained being based upon a number of unsuccessful transmissions of

the data packet or a predetermined initialized value [col 5, lines 43-46; and col 8, lines 36-46].

Watanabe does not specifically disclose the obtained back-off delay window is equal to a

preceding or future back-off delay window.

.Abi-Nassif discloses the obtained back-off delay window is equal to a preceding or future

back-off delay window [i.e. previous and current window are equal to window size 512] [col

10, lines 60-63].

It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Watanabe and Abi-Nassif because Abi-Nassif's teaching of back-off delay window would allow Watanebe's system to control and adjust contention window that can reduce delay in network retransmission.

13.   As per claim 8, Watanabe discloses the preceding back-off delay window is a back-off delay window which occurred immediately prior to the obtained back-off delay window [col 11, lines 60-65].

14.   As per claim 12, it is rejected for similar reason as stated above in claim 4.

15.   As per claim 13, Watanabe disclose the formula for determining the obtained back-off delay contains a function for converting a non-integer value to an integer value [col 5, lines 26-29].

16.   As per claim 14, Watanabe discloses the function converts the non-integer value to a smallest integer value which is greater than the non-integer value [col 11, lines 53-54].

17.   As per claim 25, Watanabe does not specifically disclose the preceding back-off delay window is less than a maximum back-off delay window. Abi-Nassif discloses the preceding back-off delay window is less than a maximum back-off delay window [col 11, lines 16-14]. It would have been obvious to a person skill in the art at the time the invention was made to

combine the teaching of Watanabe and Abi-Nassif because it would enable the system to report

error and stop transmitting if the delay time is too large.

18.   As per claim 26, it is rejected for similar reasons as stated above in claim 25.

19.   Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe

et al. [US Patent No 6,285,662], in view of Berkema et al. [US Patent No 5,699,515].

20.   As per claim 18, Watanabe discloses a method of transmitting data over a medium, the

method comprising the steps of:

transmitting a data packet without contention [col 3, lines 51-55].

Watanabe does not specifically disclose decreasing a back-off delay window for

transmitting a next data packet, the decreased back-off delay window resulting in an obtained

back-off delay window being greater than a smallest back-off delay window, and wherein the

decrease in the back-off delay window is based upon a variable integer value or an

predetermined value.

Berkema discloses decreasing a back-off delay window for transmitting a next data

packet [Abstract; col 2, lines 25-28; and col 6, lines 59-63], the decreased back-off delay

window resulting in an obtained back-off delay window being greater than a smallest back-off

delay window [col 4, lines 2-4], and wherein the decrease in the back-off delay window is

based upon a variable integer value or a predetermined value [col 6, lines 44-46].

It would have been obvious to a person skill in the art at the time the invention was made

to combine the teaching of Watanabe and Berkema because Berkema's teaching of back-off

delay window would enable dynamic adjust back-off window size to improve system

performance.

21.   As per claim 19, Watanabe discloses if the obtained back-off delay window is less than a

predetermined minimum back-off window, the obtained back-off delay window is set equal to a

predetermined minimum back-off window [col 9, lines 33-53].

22.   As per claim 20, Watanabe discloses the obtained back-off delay window is found by

subtracting two from a variable value corresponding a number of unsuccessful transmissions of a

previously transmitted data packet, the resulting difference is then applied to a formula to

generate the obtained back-off delay window [col 11, lines 53-56].

23.   Claims 2, 3, 9-11, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Watanabe et al. [US Patent No 6,285,662], in view of Abi-Nassif [US Patent No 6,215,792],

and further in view of Shaffer et al. [US Patent No 6,172,983].

24.   As per claim 2, Watanabe and Abi-Nassif do not specifically disclose the obtained back-

off delay window is found using a lookup table. Shaffer discloses the obtained back-off delay

window is found using a lookup table [Figure 1]. It would have been obvious to a person skill

in the art at the time the invention was made to combine the teaching of Watanabe, Abi-Nassif

and Shaffer because Shaffer's teaching of lookup table would allow to manage data transmission

collisions such that a high network throughput and a low network latency are achieved in a cost

efficient manner [Shaffer, col 3, lines 24-30].

25.   As per claim 3, Shaffer discloses the lookup table comprises predetermined back-off

delay window values determinable based upon a number times a given data packet is

unsuccessfully transmitted [Figure 1; and col 5, lines 1-7].

26.   As per claim 9, Watanabe and Abi-Nassif do not specifically disclose the future back-off

delay window is a back-off delay window which occurs immediately following the obtained

back-off delay window. Shaffer discloses the future back-off delay window is a back-off delay

window which occurs immediately following the obtained back-off delay window [col 6, lines

36-39]. It would have been obvious to a person skill in the art at the time the invention was

made to combine the teaching of Watanabe, Abi-Nassif and Shaffer because Shaffer's teaching

would allow to increase system performance.

27.   As per claim 10, it is rejected for similar reason as state above in claim 2.

28.   As per claim 11, it is rejected for similar reason as stated above in claim 3.

29.   As per claim 24, Watanabe discloses the obtained back-off delay window is found by

subtracting two from a variable integer value corresponding the number of unsuccessful

transmissions of a previously transmitted data packet [col 11, lines 53-56]. Watanabe and Abi-

Nassif do not specifically disclose the resulting difference is then applied to a lookup table

containing back-off delay window values to thereby reference a corresponding back-off delay

window. Shaffer discloses the resulting difference is then applied to a lookup table containing

back-off delay window values to thereby reference a corresponding back-off delay window [

Figure 1; and 104, Figure 5]. It would have been obvious to a person skill in the art at the time

the invention was made to combine the teaching of Watanabe, Abi-Nassif and Shaffer because

Shaffer's teaching would provide an effective way to control retransmission traffic.

30.   THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing
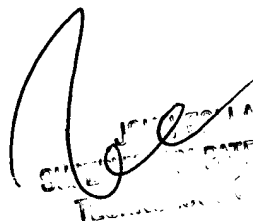
date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dustin Nguyen whose telephone number is (571) 272-3971. The examiner can normally be reached on flex schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Follansbee John can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dustin Nguyen
Examiner
Art Unit 2154